Claims

- A method for producing protoplasts of cassava or a closely related species, which protoplasts are capable of regeneration into plants, comprising producing friable embryogenic callus from explants of cassava or a closely related species and isolating protoplasts from said friable embryogenic callus.
- 2. The method of claim 1, wherein the friable embryogenic callus is subjected to culture in a liquid medium.
- The method of claim 1 or 2, wherein a mixture of cell wall degrading enzymes, such as a cellulase, a pectolyase and/or a macerozyme are used to produce protoplasts.
- 4. The method of claim 1, wherein the plants from which explants are taken are pretreated with an auxin.
- The method of claim 1, wherein the friable embryogenic callus is produced from torpedo shaped primary or mature embryos.
- The method of claim 5, wherein the embryos are induced on primary explants.
- 7. A protoplast obtainable by the method of anyone of the aforegoing claims
- 8. A method for transforming a protoplast of a cassava or a closely related species by providing said protoplast with additional genetic information through infection by a bacterium comprising said additional genetic information such as Agrobacterium tumefaciens, by electroporation or chemical poration providing a vector comprising said additional genetic information or by particle bombardment wherein the particles are coated with the additional genetic information, wherein a protoplast according to claim 7 is transformed.
- 9. A transformed protoplast obtainable by the method of claim 8.

- The transformed protoplast of claim 9, wherein the additional genetic information comprises a gene of interest.
- The transformed protoplast of claim 9, wherein the additional genetic information comprises an antisense construct.
- 12. The transformed protoplast of claim 11, wherein the antisense construct is capable of inhibiting the amylose synthesis pathway.
- 13. A method for regenerating plants from protoplasts, wherein the protoplast of anyone of claims 7 or 9-12 is induced to produce an embryo, which embryo is consequently induced to produce a plant.
- A cassava plant or a closely related species thereof obtainable by the method of claim 13.
- 15. The plant of claim 14 obtainable from the protoplast of claim 12, wherein the tubers contain essentially no amylose.
- 16. A method for isolating starch from a tuber of the plant of claim 14 or 15 comprising the steps of:
- washing the tuber, followed by grating and milling it;
- separating starch from fibers and juice in a separator;
- sieving the starch;
- washing the starch; and
- drying the starch.
- 17. The method of claim 16, wherein the starch is washed in a hydrocyclone.
- 18. The method of claim 16, wherein the starch is dried in a vacuum filter followd by drying in a drying tower.
- 19. A starch obtainable by the method of anyone of the claims 16-18.
- 20. The starch of claim 19 having an amylopectin content of at least 95 wt.%, based on the (dry substance) weight of the starch.
- 21. The starch of claim 20 having an amylopectin content of at least 98 wt.%, based on the (dry substance) weight of the starch.